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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,782	04/09/2004	Bernhard Forstl	071308.0546	1453

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EXAMINER	
KISWANTO, NICHOLAS	

ART UNIT	PAPER NUMBER
3664	

MAIL DATE	DELIVERY MODE
01/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/821,782	FORSTL, BERNHARD	
	Examiner	Art Unit	
	Nicholas Kiswanto	3664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-6,9,11 and 13-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-6, 9, 11, 13-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

KHOI H. TRAN
SUPERVISORY PATENT EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1, 5, 6, 9, 11, and 15 – 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Arnold (6,545,852).

As to claim 1, Arnold/852 shows a method for increasing the safety of operation of an electrical component, comprising the steps of: generating a control signal by a microcontroller (col 11, line 16) to actuate a load (col 18, line 1 – 2), amplifying the control signal (col 7, line 41), detecting actively a change in the switching state of a relevant load (col 7, line 40), and while the microcontroller is in a sleep mode (col 20, line 26) detecting a disturbance of said control signal by detecting a change in the amplified control signal through a wake- up interrupt input of said microcontroller (col 17, line 66).

As to claim 5, Arnold/852 further shows the method according to Claim 1, wherein diagnostic means are used to determine whether a fault state can be

eliminated by the microcontroller, wherein remedial action being initiated by a system control unit if the microcontroller fails (col 15, line 7 – 11).

As to claim 6, Arnold/852 shows a device for increasing the safety of operation of an electrical component in a circuit, comprising a microcontroller (col 11, line 16); an amplifier (col 7, line 41) having an input coupled to an output port of said microcontroller (Fig. 2); a load coupled to an output of said amplifier (col 18, line 1 – 2) and means for actively detecting a change of an output signal generated by said amplifier (col 7, line 40), wherein said means for actively detecting a change are coupled with an interrupt input of said microcontroller (col 17, line 66).

As to claim 9, Arnold/852 further shows the device according to Claim 6, wherein the means for actively detecting a change comprise a resistor network coupled between the output of the amplifier and a ground potential (col 14, line 23).

As to claim 11, Arnold/852 shows a device for increasing the safety of operation of an electrical component, in particular of electrical components in a vehicle, comprising: a microcontroller (col 11, line 16) for actuating a load (col 18, line 1 – 2) via an amplifier (col 7, line 41), means for detecting actively a change in the switching state of a relevant load (col 7, line 40), and wherein the

microcontroller is operable to be put in a sleep mode (col 20, line 26) and while in sleep mode detects a disturbance of said control signal which causes a change in the amplified control signal through a wake-up interrupt input of said microcontroller (col 17, line 66).

As to claim 15, Arnold/852 further shows the device according to Claim 11, comprising a system control unit coupled with said means for performing diagnostic to determine whether a fault state can be eliminated by the microcontroller, wherein the system control unit is operable to initiate remedial action if the microcontroller fails (col 15, line 7 - 11).

As to claim 16, Arnold/852 further shows the method according to Claim 1, wherein to eliminate a fault state upon detection of a disturbance, the microcontroller de-activates the load (col 22, line 32).

As to claim 17, Arnold/852 further shows the method according to Claim 16, wherein upon detection of a disturbance, the microcontroller is switched from a sleep mode into an active mode and resets said control signal (col 13, line 12).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold/852, in view of Ober (6,665,802).

As to claims 3 and 13, Arnold/852 discloses the claimed invention as shown above. However, it is silent as to the specifics of a non-maskable interrupt readback input.

Ober/802 shows the commonly well-known technique of using a non-maskable interrupt port (col 6, line 11).

It would have been obvious to one of ordinary skill in the art to provide Arnold/852's invention with Ober/802's teaching since the use of a non-maskable interrupt is commonly well-known in the art.

5. Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold/852, in view of Larsson et al. (2001/0052728).

As to claims 4 and 14, Arnold/852 discloses the claimed invention as shown above, including a vehicle electrical system control unit driving an on/off load (col 5, line 35). However, it silent as to the specifics of said load being a central locking motor.

Larsson/728 shows the commonly well-known method of a central locking motor being driven as an on/off load [0015].

It would have been obvious to one of ordinary skill in the art to provide the invention of Arnold/852 with the teaching of Larsson/728 since driving a central locking motor is commonly well-known in the art.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 3-6, 9, 11, and 13-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Kiswanto whose telephone number is (571)

270-3269. The examiner can normally be reached on Monday - Friday, 8AM - 5PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on (571) 272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nicholas Kiswanto
January 7, 2008

KHOI H. TRAN
SUPERVISORY PATENT EXAMINER